7200003

THE UNITED STATES OF AMERICAN

TO ALL TO WHOM THESE PRESENTS SHALL COME: Denholm Seeds

TUltereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF SEVENTEEN YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT I STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

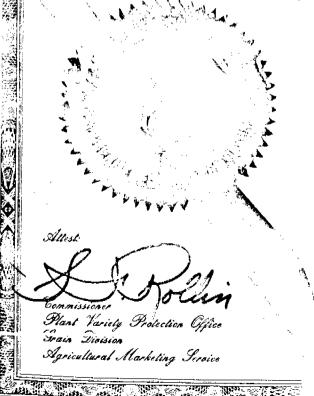
NASTURTIUM

'Golden Jewel'

In Testimony Tonevect, I have hereunte set my hand and caused the seal of the Dant Variety Protection Office to be affixed at the City of Washington this 20th day of November in the year of our Lord one thousand nine hundred and seventy-four

Earl 1 But

Secretary of Agriculture



(DATE)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION HYATTSVILLE, MARYLAND 20782

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.	N FUK PLANT VARI	ETTERUTECTION	CERTIFICATE		
1. VARIETY NAME OR TEMPORARY	2. KIND NAME		FOR OFFICIAL USE ONLY		
DESIGNATION	NIA CHILDHITIM		PV NUMBER 12002		
Golden Jewel	NASTURTIUM 4. FAMILY NAME (BO	tenicali	FILING DATE	TIME	
3. GENUS AND SPECIES NAME	4. FAMILY NAME (BO	ranicai)	7.19.71	3 P.M.	
Tropaeolum majus	Tropaeolace	Tropaeolaceae		BALANCE DUE	
	5. DATE OF DETER	MINATION	<u> </u>	\$	
	1970		350	\$	
6. NAME OF APPLICANT(S)		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP			
W. NAME OF ATTENDANCES	Code)	Code) CODE AND NUMBER			
DENHOLM SEEDS	222 North "A" Street			805-736-2703	
	Lompoc, Cal	Lompoc, California 93436 805-73			
	·				
9. IF THE NAMED APPLICANT IS NOT A P		10. STATE OF INCOM	RPORATION	11. DATE OF INCOR-	
ORGANIZATION: (Corporation, partnership	p, association, etc.)	Colifornia		1952	
Corporation	·	California ant representative(s), if any, to serve in this application			
				ma receive and papers.	
Harry A. Joy c/o I	Denholm Seeds,				
		Lompoc, Ca	111. 93436		
	e ⁿ or				
13. CHECK BOX BELOW FOR EACH ATTAC					
X 13A. Exhibit A, Origin and Br	eeding History of the	Variety (See Section	on 52 of the Plant V	ariety Protection Act.)	
K 13B. Exhibit B, Botanical Des	scription of the Varie	ty			
🔀 130. Exhibit C, Objective Des	scription of the Variet	у			
💢 130. Exhibit D, Data Indicati	ve of Novelty				
X 13E. Exhibit E, Statement of t				(.:(:-112	
14A. Does the applicant(s) specify th (See Section 83(a), (If "Yes," a	answer 14B and 14C b	elow.)	YES K NO		
14B. Does the applicant(s) specify that this variety be limited as to number of generations? 14C. If "Yes," to 14B, how many generations of production beyond breeder seed?					
limited as to number of generati	YES XNO	FOUNDATIO		D CERTIFIED	
The applicant declares that a viable ance of a certificate and will be rep					
The undersigned applicant(s) of the uniform, and stable as required in Plant Variety Protection Act.	ois sexually-reproduce Section 41 and is ent	ed novel plant varie itled to protection	ty believes that the under the provisions	variety is distinct, s of Section 42 of the	
Applicant is informed that false re	presentation herein c	an jeopardize prote	ction and result in I	penalties.	
10/4/33		Har	Ly GAPPIN		
(DATE)		(s	IGNATURE OF APPLY	TT)C T	
			•	-4.	

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, 6525 Belcrest Road, Hyattsville, Maryland 20782. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

ITEM

- Insert the date the applicant determined that he had a new variety based on the definition in Section 41 (a) of the Act and decision is made to increase the seed.
- 13a First, give the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method. Second, give the details of subsequent stages of selection and multiplication. Third, indicate the type and frequency of variants during reproduction and multiplication and state how these variants may be identified. Fourth, provide evidence on stability.
- 13b First, give any special characteristics of the seed and of the plant as it passes through the seedling stage, flowering stage and the fruiting stage. Second, describe the mature plant and compare it with a similar commercial variety grown under the same conditions, and indicate the differences.
- 13c A supplemental form will be furnished by the PVPO to describe in detail a variety for each kind of seed.
 - 13d Provide complete data indicative of novelty. Seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty may be submitted. Seeds submitted may be sterile.
 - 13e Indicate whether applicant is the actual breeder, the employer of the breeder, the owner through purchase or inheritance, etc.

Exhibit A

Origin and Breeding History of the Variety

- "Golden Jewel" originated as a selection from the variety Jewel Mixed taken in 1965.
- 2. Selections were made each year for five years and in 1970 pure lines were obtained and the increase to the stock seed stage commenced. The first commercial crop was planted in 1972.
- This line gives very little problem as far as roguing is concerned as very few off colors show. We have to watch for the tall trailing plants which normally show in dwarf Nasturtium varieties.
- 4. A crop was grown in 1973 and very little roguing took place. This consisted mainly of removing some trailing type plants.

Exhibit B

Botanical Description of the Variety

l. "Golden Jewel" is a dwarf type of Nasturtium with semi-double golden yellow flowers. One of the distinct features is that the flowers stand well clear of the foliage.

The plants grow to about 30 cm in height and the foliage is medium green in color. The flowers are semi-double and are approximately 5-6 cm. in diameter.

This variety flowers freely in the cooler, coastal areas. In warmer climates the best show is produced early and late in the season when the temperatures are lower.

FORM GR-470-27 (5-15-73)

Pollen:

1 = ABSENT

2 = PRESENT

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

OBJECTIVE DESCRIPTION OF VARIETY

NASTURTIUM (TROPAEOLUM SPP.)

(Nasturtium)

NAME OF APPLICANT(S)	FOR OFFICIAL USE ONLY
Denholm Seeds	PVPQ NUMBER
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	72203
222 North "A" Street	DESIGNATION
Lompoc, Calif. 93436	Golden Jewel
Place the appropriate number that describes the varietal character of this variety in the Place a zero in first box (*.s. 089 or 09) when number is either 99 or less or	
1. SPECIES:	
1 = MAJUS 2 = PELTOPHORUM (Lobbianum) 3 = PEREGRINUM 4 5 = OTHER (Specify)	= MINUS
1 = DIPLOID 2 = TETRAPLOID 3 = OTHER (Specify)	
2. PLANT:	
1 = TALL/CLIMBING > 60 CM. 2 = BUSH ≤ 60 CM.	
0 3 D CM, HIGH	
6 0 DAYS FROM EMERGENCE TO ANTHESIS	
3. STEM (Mature):	
1 = SUCCULENT, THICK 2 = NOT SUCCULENT, RIGID 3 = WOODY	
4. LEAF:	
3 Shape: 1 = SCALLOPED 2 = DIVIDED OR LOBED 3 = ENTIRE	
0 6 CM. ACROSS (Leaf size)	
CM. PETIOLE LENGTH	•
Surface: 1 = NOT GLAUCOUS 2 = GLAUCOUS	
Order when crushed: 1 = MILD 2 = PUNGENT	.:
Color: 1 = LIGHT GREEN (Whirlybird) 2 = MEDIUM GREEN 3 = DAR	K GREEN (Glorius Gleam) 4 = VARIEGATED
5. FLOWER:	
Type: 1 = SINGLE (\leq 5 petals) 2 \approx SEMIDOUBLE (8 - 15 at 2 at 2) 3 = DOUBLE (\geq 15 petals) 4 = VARIOUS TYPES ON	
0 6 CM. ACROSS (Flower size)	
0 8 CM. PEDUNCLE LENGTH	
Petal Shape: 1 = POINTED 2 = NOTCHED 3 = ENTIRE	
Petal Margin: 1 = STRAIGHT 2 = WAVY	
2 Spur: 1 = ABSENT 2 = PRESENT	
Spur: 1 = STRAIGHT 2 = CURVED	4
Pistil: 1 = ABSENT 2 = PRESENT	

FORM GR-470-27 (REV	ERSE)					
5. FLOWER (Continued):		-			
1 Flower Color:	1 = UNIFORM 2 = VARIABLE ON SAME PL	_ANT				
	2 = YELLOW 3 = ORANGE 4 = RI 8 = VARICOLORED (Describe)	ED-ORANGE 5 = R	ED 6 = SCARLET			
Dark Spot: 1 = ABSENT 2 = PRESENT						
6. DISEASE RESISTANT: (0 = Not Tested; 1 = Susceptible; 2 = Resistant)						
O LEAF SPOT	T O SPOTTED WILT O MOSAIC					
O OTHER (Specify)						
7. INSECT RESISTANT: (0 = Not Tested; 1 = Susceptible; 2 = Resistant) O APHIDS OTHER (Specify)						
8. INDICATE A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED:						
CHARACTER	VARIETY	CHARACTER	VARIETY			
Plant type	Gem or Globe Golden	Flower type	Gem or Globe Golden			
Plant size	Gem or Globe Golden	Flower size	Gem or Globe Golden			
Leaf shape	Gem or Globe Golden	Petal shape	Gem or Globe Golden			
Leaf size	Gem or Globe Golden	Petal color	Gem or Globe Golden			
Petiole length	Gem or Globe Golden	Spur shape/length	Gem or Globe Golden			

REFERENCES

Bailey, L. H. 1949. Manual of Cultivated Plants. MacMillan, New York, N.Y.

USDA Year Book Separate, 1937. Improvement of Flowers by Breeding.

COMMENTS:

Application No. 72003 Nasturtium "Golden Jewel"

Exhibit D

Data Indicative of Novelty

Novelty is based on the flowering characteristics:

- 1. Dwarf Habit
- Semi-double flowers above the foliage
- 3. First dwarf Golden Yellow variety of the Jewel type to be homozygods for color

Exhibit E

Statement of Applicant's Ownership

Denholm Seeds, Lompoc, California believes it is the sole, original and first breeder of the "Crimson Jewel" variety of Nasturtium for which it solicits a certificate of protection.